

**Iowa Department of Natural Resources
Environmental Protection Commission**

ITEM

11

DECISION

TOPIC

**Notice of Intended Action – Water Supply Chapters 40 and 43: Minor
Water Main Construction Permit**

The Commission is asked to approve the attached Notice of Intended Action to amend Chapter 40: Scope of Division – Definitions – Forms – Rules of Practice, and Chapter 43: Water Supplies – Design and Operation of the Iowa Administrative Code. The chapters pertain to the water supply requirements for design and operation. The changes being proposed would create a Minor Water Main Construction Permit, which would allow for the construction of extensions to and replacement of minor water mains.

Currently, a water system must obtain a construction permit prior to construction of any water distribution system extension or replacement. Rural water systems can receive requests to connect to their system from landowners who have had well trouble or when they happen to be working in the area. These minor extensions to the system do not raise any operation or safety concerns as long as they are constructed appropriately and the system can maintain adequate pressures.

Applying for and issuing a construction permit can take longer than many of these situations call for from the business perspective of the system and from a regulatory perspective. To obtain a Minor Water Main Construction Permit, the system would need to have on file with the Iowa DNR an approved up-to-date hydraulic analysis of the system and approved standard specifications for water main construction. Only minor water main extensions included in the hydraulic analysis would be covered under the permit. The system would be required to submit an updated hydraulic analysis to the department for review. The system would also be required to annually submit as-built plans of all water mains constructed under the permit, prepared and submitted by a licensed professional engineer, along with the appropriate construction permit schedules and the construction permit fee.

Stakeholders have been advised of this rulemaking via e-mail. One public hearing is scheduled to obtain any additional public comment.

Charles C. Corell
Chief, Water Quality Bureau
Environmental Services Division

February 12, 2007

ENVIRONMENTAL PROTECTION COMMISSION
Notice of Intended Action

Pursuant to the authority of Iowa Code sections 455B.171 through 455B.188 and 455B.190 through 455B.192, the Environmental Protection Commission hereby gives Notice of Intended Action to amend the following chapters of the Iowa Administrative Code: Chapter 40: "Scope of Division – Definitions – Forms – Rules of Practice," and Chapter 43, "Water Supplies – Design and Operation."

The amendment to Chapter 40 pertains to the forms of the public water supply program, while the amendments to Chapter 43 pertain to the public water supply program's construction permitting requirements for design and operation. Construction permits are required of all systems for any construction, installation, or modification of any project that affects a public water supply system. The changes being proposed would create a Minor Water Main Construction Permit, which would allow for the construction of extensions to and replacement of minor water mains during the duration of the permit, without the system having to apply for an individual permit prior to each construction project. The rules establish minimum criteria that must be met by a public water supply system in order to obtain a permit. The "as-built" plans that have been prepared and submitted by a licensed professional engineer, construction permit fees, and construction permit schedules must be submitted to the department each year under the permit.

Any interested person may make written suggestions or comments pertaining to the proposed rule revisions on or before April 20, 2007. Such written materials should be directed to Diane Moles, Water Supply Engineering Section, Iowa Department of Natural Resources, 401 SW 7th Street, Suite M, Des Moines, IA 50309-4611; fax 515/725-0348 or diane.moles@dnr.state.ia.us. Persons wishing to convey their views orally should contact her at 515/725-0281.

When submitting comments, the Water Supply Engineering Section encourages you to utilize the following guidelines. These guidelines aid in accurately understanding and creating a record of your input.

1. Include your mailing address and contact information.
2. Please state if you are submitting comments as an individual or on behalf of a municipality, business, or organization.
3. Cite the specific rule(s) on which you are commenting.
4. Explain your views as clearly as possible by describing any assumptions, data, or technical information you utilized.
5. Provide specific examples to illustrate your concerns.
6. Offer alternative language that you think would improve the specific rule(s) and explain why.

A public hearing will be held on April 19, 2007 at 10:00 a.m. in the conference room at the IDNR Water Supply office at 401 SW 7th Street, Suite I, Des Moines, IA, 50309, at which time persons may present their views either orally or in writing. At the hearing, persons will be

asked to give their names and addresses for the record and to confine their remarks to the subject of the rule.

Any persons who intend to attend the public hearing and have special requirements, such as hearing or mobility impairments, should contact the Department of Natural Resources to advise of special needs.

These amendments are intended to implement Iowa Code section 17A.3(1)“b,” chapter 455B division III part 2, sections 455B.105 and 455B.173.

The following amendments are proposed.

Item 1. Amend subrule 567—40.3(1) as follows:

40.3(1) *Construction permit application forms.* Schedules “1a” through “16d” are required.

<u>Schedule No.</u>	<u>Name of Form</u>	<u>Form Number</u>
“1a”	General Information	542-3178
“1b”	Certification of Project Design <u>Minor Water Main Construction Permit</u>	542-3174 542-3151
“1c”	Fee Schedule	542-3179
“2a”	Water Mains, General	542-3030
“2b”	Water Mains, Specifications	542-3031
“2c”	<u>Notification of Minor Water Main Construction</u>	<u>542-3152</u>
“3a”	Water System, Preliminary Data	542-3032
“3b”	Water Quality Data	542-3029
“3c”	Surface Water Quality Data	542-3028
“4”	Site Selection	542-3078
“5a”	Well Construction	542-1005
“5b”	Well Appurtenances	542-3026
“5c”	Well Profile	542-1006
“5d”	Surface Water Supply	542-3139
“6a”	Distribution Water Storage Facilities	542-3140
“6b”	Distribution Pumping Station	542-3141
“7”	Schematic Flow Diagram	542-3142
“8”	Aeration	542-3143
“9”	Clarification/Sedimentation	542-3144
“10”	Suspended Solids Contact	542-3145
“11”	Cation Exchange Softening	542-3146
“12”	Filters	542-3147
“13a”	Chemical Addition	542-3141
“13b”	Dry Chemical Addition	542-3130

“13c”	Gas Chlorination	542-3131
“13d”	Fluoridation	542-3132
“13e”	Sampling and Tests	542-3133
“14”	Pumping Station	542-3134
“15”	Process Water Storage Facilities	542-3135
“16a”	Wastewater, General	542-3136
“16b”	Waste Treatment Ponds	542-3137
“16c”	Filtration and Mechanical	542-3138
“16d”	Discharge to Sewer	542-3103

Item 2. Amend subrule 567—40.4(1) as follows:

40.4(1) *General procedures.* Applications for written approval from the department for any new construction or for reconstruction pursuant to 567—Chapter ~~41~~ 43 shall consist of complete plans and specifications, application fee, and appropriate water supply construction permit application schedules. Upon review, the department will issue a construction permit for approval of a project if the review shows that the project meets all departmental design standards in accordance with 567—Chapter 43. Approval of a project which does not meet all department design standards will be denied unless a variance as provided by 567—paragraph 43.3(2)“c” is granted. A variance may be requested at the time plans and specifications are submitted or after the design discrepancy is pointed out to the applicant.

The department may review submitted project plans and specifications and provide comments and recommendations to the applicant. Departmental comments and recommendations are advisory, except when departmental review determines that a facility does not comply with the plans or specifications as approved by the department or comply with the design standards pursuant to the criteria for certification of project design. The owner of the system must correct the deficiency in a timely manner as set forth by the department.

Item 3. Amend subrule 567—40.4(4) as follows:

40.4(4) *Certification of project design.* A permit shall be issued for the construction, installation or modification of a public water supply system or part of a system or for a water supply distribution system extension if a qualified, licensed professional engineer certifies that the plans and specifications comply with federal and state laws and regulations or that a variance to standards has been granted by the department. Refer to Schedule ~~4b~~ 1a.

Item 4. Amend subparagraph 567—43.3(3)“c”(2) as follows:

(2) “As-built” Construction. “As-built” construction is defined as construction that occurred before a construction permit is issued. The fee shall be calculated according to 43.3(3)“c”(1), plus an additional fee of \$200 and is effective for construction that occurred after December 1, 2003. The fee for water main projects submitted in accordance with paragraph 43.3(3)“e” shall be calculated in accordance with subparagraph 43.3(3)“c”(1), however the additional as-built fee of \$200 shall not be assessed for these projects.

Item 5. Adopt the following **new** paragraph 567—43.3(3)“e”.

e. Minor water main construction permit. A public water system may obtain a minor water main construction permit from the department for construction of water mains that serve additional users. By obtaining this permit, the system is able to construct new minor water mains or extend existing water mains without obtaining an individual construction permit for each specific water main. The permit shall allow construction of new or replacement water mains, that do not exceed six inches in diameter, and, in aggregation, do not increase the average daily demand (in gallons per day) of the public water supply system by more than five percent over the duration of the permit.

The additional users must have been included in the system's hydraulic analysis that has been approved by the department. The water demands of the additional users must be consistent with the water demands in the approved hydraulic analysis.

A minor water main construction permit shall be issued subject to the following conditions:

(1) The system has standard specifications for water main construction approved and on file with the department;

(2) The system has adequate source capacity and, where treatment is provided, adequate treatment plant capacity to meet the peak day demand of all existing users and the proposed additional users covered under the permit;

(3) The system has adequate storage capacity to meet the average day demand of all existing users and the proposed additional users covered under the permit; and

(4) The system submits an application for and the department issues a minor water main construction permit prior to the construction of any water main covered by the permit. The application shall include the following:

1. An up-to-date hydraulic analysis of the system, prepared and submitted by a licensed professional engineer, must be either on file with the department or submitted with the permit application. The hydraulic basis of flow (gallons per minute per connection) used in the analysis must be acceptable to the department. The hydraulic analysis shall include:

- all existing water mains within the system,
- all proposed water mains intended to be covered by the permit,
- a demonstration that the system has adequate hydraulic capacity to serve the existing and new users under peak flow conditions without causing the pressure to fall below 20 psi anywhere within the system,
- the location of all potential users of the system,
- the diameter of all existing and proposed pipes,
- the projected system flows, and
- the static and dynamic pressures anticipated throughout the system with the addition of the new users.

2. A completed Minor Water Main Construction Permit Application Schedule 1b (Form 542-3151), listed in 567—subrule 40.3(1).

3. The permit application must be submitted to the department 90 days before the anticipated first use of the permit.

4. The minor water main construction permit expires on December 31st of the year that it is issued.

(5) The system must submit the completed Schedule 2c, Notification of Minor Water Main Construction (Form 542-3152) prior to the construction of each minor water main covered by this permit. Each water main covered by the permit must have either been included in the

previously submitted hydraulic analysis or in an update to the hydraulic analysis, submitted with the Schedule 2c. If an update to the hydraulic analysis is submitted with the Schedule 2c, it must include all portions of the distribution system potentially impacted by the new construction.

(6) By January 31 of the following year, the system shall submit the following to the department:

- A complete set of plans for all water main extensions constructed under the permit. The plans must be prepared and submitted by a licensed professional engineer.
- Completed Schedules 1a, 1c, and 2a, listed in 567—subrule 40.3(1), and
- The construction permit fee calculated in accordance with subparagraph 43.3(3)“c”(1). The fee calculation shall be based upon the total length of water main constructed under the permit. For the purpose of calculating the total amount of water main construction permit fees, paid by the system in accordance with 567—subparagraph 43.3(3)“c”(4), the fee will be credited to the calendar year in which the actual fee was received by the department.

(7) A permit shall contain such conditions as are deemed necessary by the director to ensure compliance with all applicable rules of the department.

(8) The director may modify in whole or in part the permit at any time. The director may suspend or revoke in whole or in part the permit at any time by providing written notice to the permit holder and is not obligated to renew the permit. Cause for modification, suspension, or revocation of the permit includes, but is not limited to, the following:

- Violation of any term or condition of the permit,
- Obtaining the permit by misrepresentation of fact or failure to disclose fully all material facts,
- Failure to submit the records and information as required by the director, both generally and as condition of the permit,
- Failure to submit timely reports from previous permits,
- Failure to construct in accordance with approved design standards, as per 567—subrule 43.3(2), or
- Failure to construct in accordance with the system’s approved standard specifications.

(9) No variance to the design standards is allowed under this permit. If a variance to the design standards is needed, the system must apply for an individual construction permit following the procedures in 567—subrule 40.4(1).